G. R. S. IX-5]

Previous references.

File No. 9/18

191 .

(Municipal)

Serial Nos.

Later references

GENERAL AND REVENUE SECRETARIAT.

Serial Nos.

Part B for December 1800

SUBJECT.

proposals for supply of water to Bangalore

Indexed
JAL

W D 68—GPB—50,000—24-7-16

D.P.H. for memorandum

Bangalore water Supply.

2 April 1892.

Dharmambudhi W.W. 2958.75

D... 2960.25

Crest of Dam below Sankeys 2969.0.

To be raised to 2975.0

Sankeys low level Sluice. 3004.50

D° H.L. Sluice.. 3019.50

D° ——— W.W 3034.0

I think we shd have two Systems of distribution

one from Dharmambudhi to serve the lower portions of the Pettah & the other from Sankeys Low level Sluice to a Reservr near the Central College or thereabouts to serve the higher portions of the Pettah. There is nothing to prevent our proceeding at once with the "Lower Service" from Dharmambudhi — but shd. in time Dharmambudhi in two ways

1. By adding to its catchments as recently proposed by Mr Scaldwell

2. By bringing in the leakings from

* Such a Channel Shd. be as near as possible along the bank of the present feeder, & it should be capable of carrying this maximum & if necessary also water from the low level Reservoir No 8 in Lavanur

Levels from 2975 to the Dharmanbadi level
~~the bar~~ to level 2960.25. There is
a difference in level of 15.25 ft
and this is ample for a masonry
Channel. Such a Channel
Shd. at once be investigated.

In either case Dharmanbadi
Wd. Easily bear raising by 1½'
this Shd. be done by making
both W W. 2960.25

If a masonry channel as
above be easily possible ~~then~~ ~~costly~~
we can dispense with the channel
in the feeder bed.

The feeder Shd. be improved &
made at uniform grade & ~~width~~ width
It is best to give at once 20' or 30', in
anticipation of additions to the Catchment.

By carrying out these works
we should ~~not~~ Complete the Low Level

The high Service must await the
pleasure of the Govt of India as to
the future of Sankey's, regarding my
which I have again written to
the Resident -

2/4/97

1892/93

MYSORE P. W. DEPARTMENT.

No. 1836

From

The Chief Engineer
of Mysore.

To

R. R.

Dated Bangalore — 4 / 4 / 92

Despatched

Enclosure No.

Subject.

[illegible]

DPW

Bangalore water Supply

As the British Govt are investigating the Mysore Scheme & have practically abandoned Rachanhalli, and as, ~~in spite of the recent delays which have sometimes as regards the disposal of Sankey's Reservoir, has~~ it behoves us to lose no further time in investigating a Suitable Scheme for the Pettah, I wd like a rough investigation made as quickly as possible of the feasibility of a new big tank on the North of Bangalore to contain enough for a 2 years' supply to the Pettah and to ~~Con~~ be commanded by or at the level of the present low level Sluice of Sankey's Reservoir.

Such a tank wd seem feasible near the Village of Amrutahalli (less than 2 miles N of Hebbal & half a mile East of the Yelhanka Road)

If we have a biggish tank in that position we cd supply the Pettah independently of the Sankey's, and if Sankey's eventually comes to us it will be an add'l Source - (See Enclosed Sketch.) -

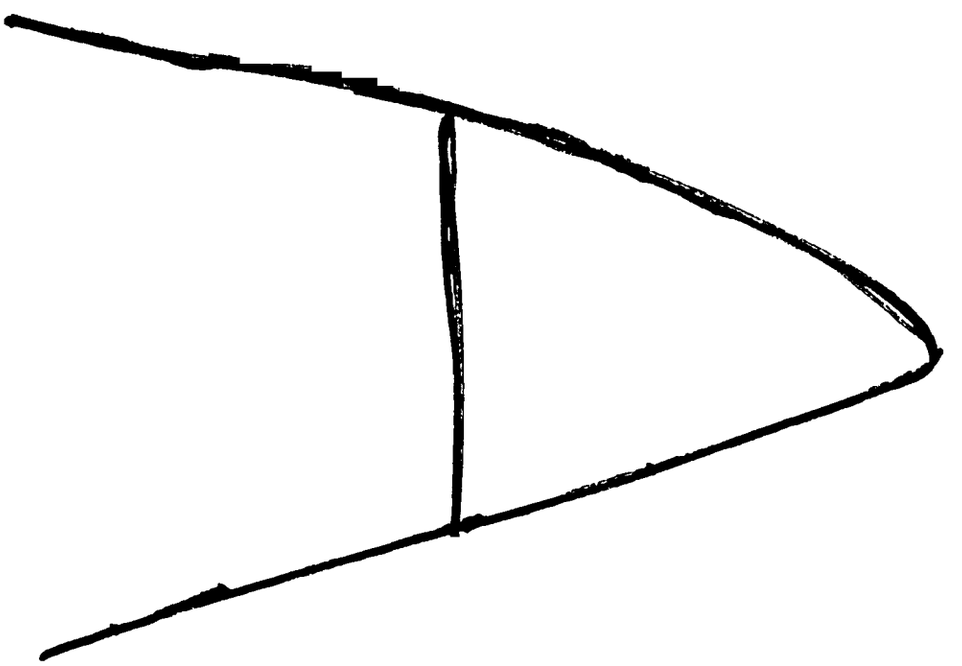
The new tank wd ~~to~~ have a Catchment of ~~[illegible]~~ Nearly 8 Square miles, and shd be capable of impounding the maximum rainfall —

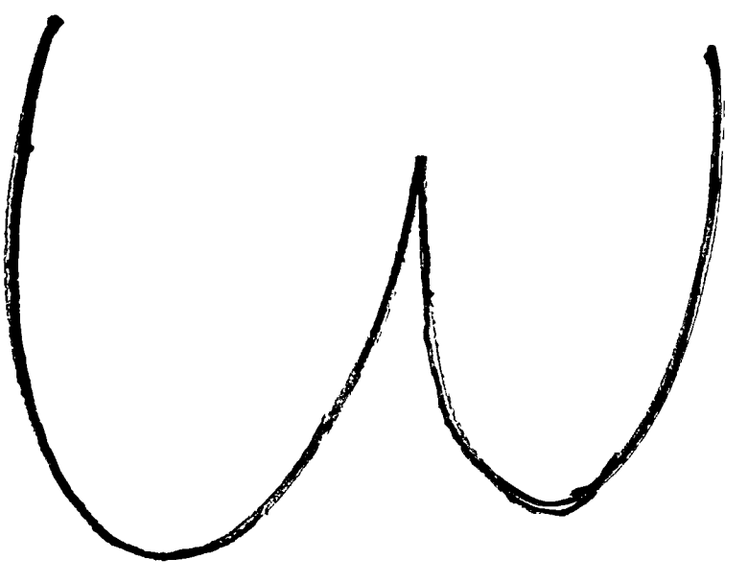
Kindly have a rough investigation made at once of such a tank — All that is at first necessary is to send out Mr Scaldwell to ride over the Catchment, take a few levels and for your to form a general idea after a reconnoissance of the Country — If this can be done within the next ~~two days~~ few days we can then, if every thing is satisfactory proceed to Elaborate the Scheme —

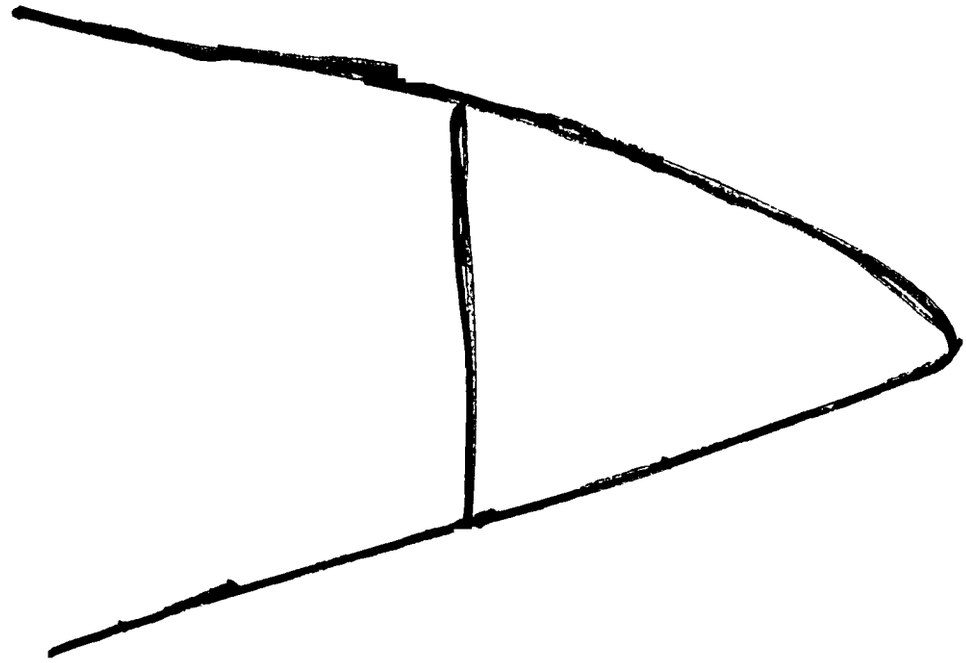
In the meantime it is as well that the matter (i.e. the proposed tank is for Potta Supply) shd not go beyond yourself & Scaldwell, and with this view your instructions to Scaldwell may be by D.O. He cannot of course have levels taken in private —

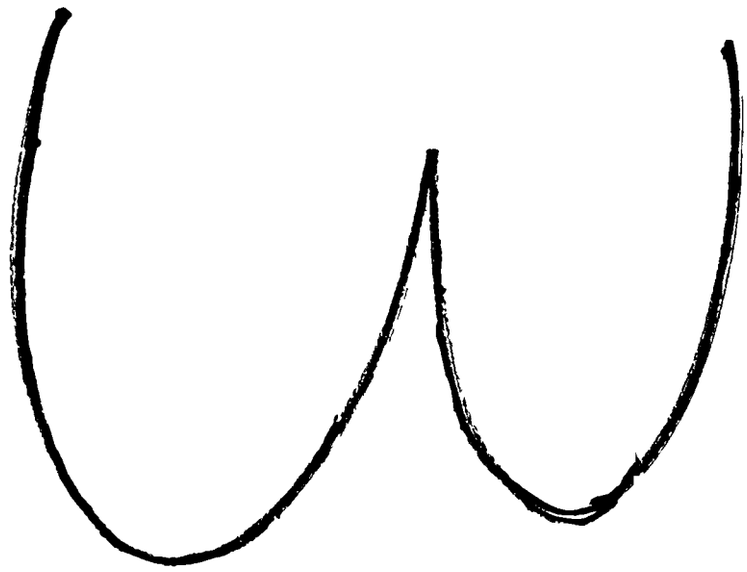
Yours truly
K Sankaran

10 April 97









Note by Colonel C. Bowen, R.E.,
Chief Engineer and Secretary
to the Govt of Mysore P.W. Deptt.

Bangalore Water Supply.

Immediately on receipt of your note on the proposal to secure for the Pettah water supply the large gathering ground North of Hebbal and there to establish a biggish tank I had the necessary levels run out to Amruthalli and yesterday morning I went over the ground with Mr. Scaldwell. —

The levels, so far as the tanks in the lateral valley at Amruthalli are concerned are not favorable. —

The level of Sankey's Tank's low level sluice is 3002-50
The level of the top of bund of Amruthalli tank, is 2953-65.
The bed of tanks in front is about 15 ft. lower than this.
A supply tank in this position is therefore, out of the question.

Even the level of the main road ~~above~~ where it crosses the

lateral

Thanks -
Mr Ricketts' mentioned
a Godi tank in
Hebbal Valley as
a good one &
prompt from
that too may
be investigated
27/4/92

valley above Amruthalli tank is only 2959.78. so above the road and between it and the contour line of the gathering ground shown on your tracing a tank is not feasible, to impound a supply and command Sankey's low level sluice.—

On first perusal of your note I took it that you meant to establish a moderator tank across one of the valleys running up into the gathering ground of 7 to 8 square miles, to impound the supply by a contour channel, and thence to supplement Sankey's tank.—

This with the average level of water in Sankey's tank, struck me as clearly impracticable but on re-perusing the proposal, I see that you meant this new tank to be an independent one, which would command the Pattah through Sankey's low level sluice, or some adjoining spot at same level—

But even thus the levels at Amruthalli show not

to

to be feasible. —

It is possible that the levels of Kodihalli tank (which I have marked with a blue pencil X on the tracing in the Hebbal valley to the North-West may afford better command, but this too I do not believe feasible. At any rate I am having levels run from Hebbal up to this tank. —

What we must do to satisfy ourselves as to the practicability or impracticability of any such scheme in this direction is to run a line of levels back from Sankey's low level sluice up any one of the lateral valleys running down from the gathering area, and note where the level 3002-50 meets the ground, a cross line say 10 ft higher than this (to allow for fall of main) must be the site of bund. To this must be added say 20 ft. for depth of water in the new tank, and from that level 3002·5+10 + 20, Contours run out right and left, and rising say 2 ft. a mile to provide for

flow

flow, will show the gathering ground that can be embraced

Now, after careful study of the Topo: sheet, I have come to the conclusion, that it would be impossible to find a tank site that would fulfil the requisite conditions satisfactorily. The level of its bed should be 3012, and to be deep enough to hold even 1 year's supply for the Pattah, the Contour arms with their fall of 2 ft. a mile, would embrace but a very limited area, and that by very tortuous circuitous lines.

Taking into consideration cost of a syphon and cost of a tunnel or very deep cut through ridge above Lankey's tank, cost of a main and pumping from Hebbal tank itself would be less than all this.—

However as soon as the levels of Kodihalli tank alluded to above have been taken as ordered I shall have lines of levels run the valleys or lines of depression and if necessary a contours accurately taken at level 3032 to test the validity of above arguments.—

I enclose your original
Memo. and tracing for ready
reference when reading
what I have said above.
Kindly return them to me
quickly, that I may have
them at hand when going
on with the investigation

C. Warren Col.R
Comdg

Bangalore
27th April
1892

(7)

Enclosures

1 Dewan's letter regarding Hesaraghatta

2 Special file Sankey's Reservoir Paper

3. Mr. Scaldwell's rough notes of levels and the Dist Commrs Statements.

MYSORE P. W. DEPT.

regarding the Hesaraghatta scheme. for which see that file.

TO THE DEWAN OF MYSORE.

for Orders.

Thanks. Please see the Separate Note of today which I send herewith on the water Supply of Bangalore I have no papers with me relating to the Hesaraghatta Scheme now proposed, nor to other Schemes. I send the Separate file relating to Sankey's Reservoir for any reference which may be found necessary

K Seshadri
31.Oct 92

Returns. Mr. Scaldwell's rough notes of levels & Calculations & the Dep. Comrs Revenue Statements These may perhaps be of Some use to Mr. Scaldwell for his Preliminary report

With reference to your notes regarding the Bangalore Water-Supply, I forward herewith a report by the Executive Engineer, Bangalore Division, on the schemes that have been proposed. These are:—

1st. To lay a pipe main from the low level sluice of the Bangalore Water-Supply Reservoir to the Bangalore District Office with distribution therefrom.

2nd. To construct a masonry channel from the dam below water supply Reservoir to the

the Dharmaboody tank -

3rd - To construct a new feeder for Dharmaboody tank -

4th - To improve the Ramashette Pandaram tank -

5th - The Narshimpura tanks project -

6th - The Hebbal tank project -

Before discussing these projects, it is necessary to state that the quantity to be stored as per your verbal instructions to the Executive Engineer is 2,50,000 cubic feet per day for 3 years and deducting evaporation and absorbtion (which cannot be accurately ascertained without waterspread being known), the quantity to be stored may be taken at 500 millions of cubic feet, and the catchment required for this sum

B

off would be about
50 sq miles.

Project no: 1— It seems useless to discuss this project till the right to water from Pantheji's reservoir is definitely settled.

Project no. 2— I consider that this project would be simply a sort of — make shift and would only give a partial supply, which would have to be supplemented hereafter.

Project no: 3— The present catchment area of the Sharmadoody tank is 795 acres and the new feeder which could only be constructed at great expense, would increase it by 583 acres bringing the total catchment up to 1378 acres or a little over 2 sq: miles out of 50 required. This project may therefore be abandoned.

abandoned.

Project no 4 - The catch-
ment area of this tank
is only 200 acres; the
catchment channel would
be nearly 3 miles in
length, and the feeder
to the Dharmaboody tank
2½ miles. The catchment
area might be in-
-creased by 240 acres,
but even with this, it
is evident that the
Project must be aban-
doned as absolutely
useless.

Project no 5 - The catch-
-ment area of the Harshimpur
tank is 4 Sq miles and
this might be increased
by 1 Sq mile, which
would make a total
of 5 Sq miles, which is
utterly inadequate to
give the supply required,
and this project must
also be abandoned

Project no 6 - This is
the only one of those men-
tioned that deserves
any

any consideration the details of this project have been discussed in Col. Bowen's note on General Fischer's project, in which it is stated that by large modifications of General Fischer's scheme as it stands, a workable & not costly project may be devised. But I quite agree with your remark, para 3 of your letter to the Resident, no 8 of 28th June 188, that the modified scheme does not offer a complete solution of the water difficulty. I believe that several other projects for the water-supply of Bangalore have been proposed, but the file of papers being with you, I am unable to give any opinion on them - As far as I can gather, there is only one project that will offer a complete solution

solution of the difficulty; and that is the Hessarghatta. This tank has a large catchment basin (far greater than the 50 Sq. miles required) in a valley favourably situated as regards rainfall, its capacity can, I believe, be increased without difficulty and there are three excellent sites for pumping stations (each over 3100' high) almost in a direct line from the tank to the City. The Project will of course cost a large sum of money, the length of piping being about 15 miles and the water having to be raised about 300'; but if it were carried out, there would be an ample and certain supply for the whole of Bangalore, Cantonment as well as City. I calculate roughly the cost of the Project at 18 Lacs of Rupees; this at-

at 4 per cent represents a revenue, Rs 72,000/; and if the working expenses (hitherto which will be approximately Rs. 60,000/, be added, the total amount that should be recovered on account of the scheme is Rs 1,32,000/, and the population being 1,80,000, this represents a charge of nearly 12 annas per head per annum.

I certainly think the scheme should be investigated, and if you approve, this will be done. Mr. Realdwell can prepare the preliminary report, but for the detailed Project, it will be necessary to appoint an Establishment of 1 asst Engineer, 2 Surveyors, and 2 draughtsmen for 6 months. —

J. McC. Campbell Lt. Col Rb.
Secretary to the Govt
Bangalore } Engore, Mysd
26th Oct/92

3rd Nov 1892

No. 4868/807

Forwarded in original with the Berwan's separate Note to Mr. Caldwell, who is requested to prepare and submit as soon as possible, the Preliminary report on the proposed Scheme.

II Also rough Notes of levels and Calculations, and Deputy Commr's Revenue Statements are herewith returned also plans received with Dist. Engr's No. 4145 dated 5th September 1892.

III - This Office Note and Berwan's note to be returned to this Office.

J. McR. Carnduff Offg Coll. & Ex Officio Secty. to the Govt. of Mysore & Coorg

Bangalore
2nd November 1892

x 8 Plans.

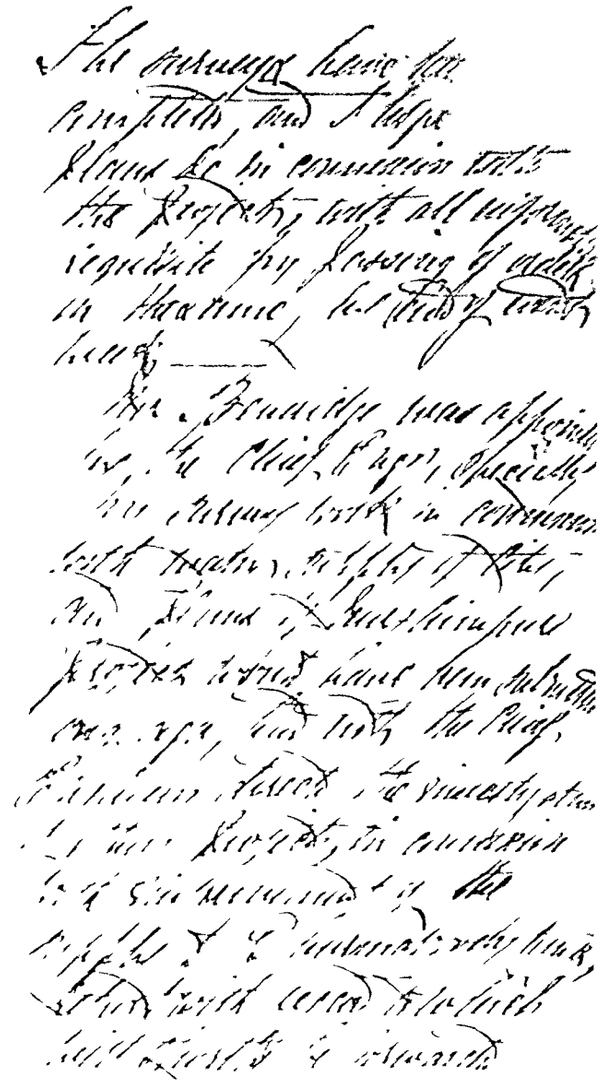
Bangalore Pettah
Water Supply

To Colonel Campbell for
information. We have to wait
for the Levels & Reports
promised by end of next
week.

28/8

Report on Improvement
of Bangalore City
Water Supply

The Chief Engineer, in his
letter dated 1892, directed the
Hesaraghatta valley, from
the Salem-Bellary road to
the head of the valley, should
first above the Bangalore-
Kolarpet railway line, be
surveyed and levelled
by him with a view to
the valley, where formation
of a reservoir was suggested
Lieutenant Ward, assisting Lieut
in connexion with a project
for that valley were subsequently
On the following day
Col. Brown directed the
Hebbal valley from the
Nagarghatta road, about the Hebbal tope,
to the Bangalore-Kolar road, the
left bank of the valley
Lieutenant Ardagh was finally
employed to take up a portion
of the Hebbal valley
the Chief Engineer also
communicated to Lieutenant
Ward the 30th ult. the
line of reservoir
Hesaraghatta valley
Lieut. Ardagh to
Lieut. Ward to
Hebbal valley
Lieut. Ardagh



(6)

No 4145
5-78

Street Surveyor's Office
Borough of Dublin
Dublin the 24th Sept 1878

Sir,

The Lord Mayor

I am directed by the Paving Committee to report for the information of the Council that they have had under consideration the question of the Paving of the Carriage Road in front of the Model Schools, and have decided to recommend that the Granite Pitching be taken up, and the Road relaid with Wood Pavement. ——

I. The Committee have also had under consideration the question of the Paving of the Carriage Road in front of the Richmond Asylum, and have decided to recommend that the Granite Pitching be taken up, and the Road relaid with Wood Pavement. ——

II & III. The Committee have also had under consideration the question of the Paving of the Carriage Road in front of the Richmond Asylum, and have decided to recommend that the Granite Pitching be taken up, and the Road relaid with Wood Pavement. ——

IV. The Committee have also had under consideration the question of the Paving of the Carriage Road in front of the Richmond Asylum, and have decided to recommend that the Granite Pitching be taken up, and the Road relaid with Wood Pavement. ——

V. The Committee have also had under consideration the question of the Paving of the Carriage Road in front of the Richmond Asylum, and have decided to recommend that the Granite Pitching be taken up, and the Road relaid with Wood Pavement. ——

VI. The Committee have also had under consideration the question of the Paving of the Carriage Road in front of the Richmond Asylum, and have decided to recommend that the Granite Pitching be taken up, and the Road relaid with Wood Pavement. ——

VII & VIII. The Committee have also had under consideration the question of the Paving of the Carriage Road in front of the Richmond Asylum, and have decided to recommend that the Granite Pitching be taken up, and the Road relaid with Wood Pavement. ——

no

Pier aboard to Karanjia.

Of the aforesaid section of line of railway and pretabled at about 44400 running yards of 12" jointed cast iron shingot piling costing £53232 was stacked by Mr Watkins work done this work considered advisable to carry out this question ought to write in Mr Watkins settled. ——

Of all the estimate and passed to the Chief Engineer that part of excavation where the piling was to be £12,000. ——

II. Piling required to be driven Water Side Section to be Pier aboard to K. ——

Of the said note is supplied for the Pier aboard to K for the Wade this we in a meeting at Calcutta the 22nd the Leo of Pier aboard in the note one mile and in all and order to carry this work utilize the labour for the Levies (Co with the Local Govt

designated the provincial water supplies of the Pettah was to some years ago) the Govt. proposed the construction of a protection channel from the dam below the reservoir, so as to catch the leakage to the Olcombood tank. ——

From the following sketch section, it will be seen that the channel would have to cross several low and deep valleys which would make it very costly. ——

The channel would be 2 miles 1176 yards in length and both sides would cost on the average £5,000, or only £4,000 less than the cost of a 12" main laid in a direct line from the dam to the town; which would be very much less valuable than the proposed channel. ——

III. New Feeder for Colombo.

The proposed line of feeder is marked on the sketch no. 2, which is to run with the line no. 1 of the 5½ from no. 1102 in Castle Street to the reservoir at the Wellawatte Junction, 1½ miles from no. 5½ of December 1891.

overrun (Karmarshetti Khandiari &c

[illegible] Give in the latest date to which land taxes etc were levied viz. IT. ——

Boundaries of land at x M.S.L. 2972·04 were taken, and are as noted on the west side of the road at M.S.L. 2986·70 and [illegible] the road, were surveyed, and then in the accompanying sheet No in.

The total area of land proposed is about 200 acres, of which the assessable [illegible] about 2·5 million cubic [illegible] the contour, and of which the east [illegible] about [illegible] Karmarshetti and Khandiari [illegible] which [illegible] to be [illegible] with [illegible] to cost [illegible] and [illegible] to be [illegible] the [illegible] of a dwelling [illegible] Karmarshetti [illegible]

——

The contour [illegible] to be increased by 240 acres to [illegible] a width of the [illegible] No 1, [illegible] contour, [illegible] right to [illegible] No 2, [illegible] West [illegible] [illegible] [illegible]

x Khanapur taluka vide M.S.L. 2958·00 ——

e was also very
and could not always join
in, and read the letter
and area. —

V. — Northern tank project

As mentioned in previous report
the Northern tank is the en-
largement of the Hebbal valley
and surveys in connection
with the project were taken
in order of the Chief Engineer.
From sheet no. V it will be
seen that the capacity of the
tank at M.S.L. 3032·50 (level
of water surface of reservoir when
full) is 2½ units or 71 million
gallons — the catchment area is
4 sq. miles, the rainfall
which the maximum run off
is to be 20·9 million gallons
and minimum 20·2 million. —

Taking this as the
yield as marked L.N. — V.
in which the curve is straight
line is carried to 1 unit
so that even with this additional
catchment, the run off would
in the least of years be utterly
inadequate to insure for even
1 year the supply asked for
by the Govt. (2,50,000 gallons per
day - supply and a little
should be sufficient for

VI. — Hebbal Project — (See Sheet No: VII)

This Project was investigated by order of the Durbar [illegible] with a view of ascertaining the cost of [illegible] reservoir [illegible] necessary to storage of the quantity of water mentioned [illegible] estimated project No V. —

Contours were taken at R.L. 70·00 and 72·00 i.e. 20 and 22 ft respectively above river level. The water spread at R.L. 70·00 is 890 acres, and at [illegible] 2120 [illegible].

The quantity [illegible] to be stored [illegible] = 276,000,000 c.ft, and [illegible] for one year (in this case 80 days by 20 c.ft per sec) = 853 [illegible] or 222·71 million cft — Total quantity to be stored 404·71 million cft. —

The run off [illegible] Water Supply [illegible] [illegible]

[illegible]

Maximum run off [illegible] per square mile — DO — DO — levels of the weir [illegible] estimated in 1934 [illegible] — 505

The [illegible] Hebbal [illegible] Supply [illegible]

far less chance of failure and at his request I have asked for his information as to whether any giving details with regard to location, size of house-plots and other terms about which the Durban Council would have to be thrown out of action in connection with the project.

I have the honour to be
Sir,
Your most obedient servant

"By Order"

1. [illegible]
For Executive Engineer
Barnala Division

Copy to the P.
Addl. Div.
-4-

1892

SEC
NO.
SEP. 92
MYSORE P. W. D.

Memo.

Water Supply of Bangalore City.

The city is at the present time, worse off for water than at any previous period in its history. It is difficult to conceive what would result on a continuance of the failure of the North-East Monsoon; Prudence dictates, that it is better to prevent the Calamity, than to battle with it after it overtakes a Community; and Experience teaches, that the hassle with it

such water as is now consumed in the City can not do so, with impunity, long.

The latest information as to a Scheme for water supply is, that a project for the Combined Supply of both the City and Contonment is to be investigated by Major Grant, so that the probability of a decision in the matter is still in the far future. Even granting that a Scheme is prepared, reported on and Sanctioned within twelve

twelve months, no water can be delivered within five years, at a moderate reckoning.

The aspect of affairs is far too serious for such delay and therefore the immediate execution of some work that would even give a partial supply appears imperative.

Looking around for a source that could be immediately utilized, General Sankey's Reservoir presents itself as the most feasible. This work was designed to supply 40000

inhabitants with 10 gallons per head per diem, but it has not filled to the extent that it ought to have done, and therefore it has not fully come into operation.

Quoting in 1868 General Sankey says" But the general capabilities of the Scheme are by no means restricted within these limits, as there are outlying gathering grounds, the rainfall on which can, if any future time, be brought in to supplement the requirements. One

Para 67, Page 63
Bangalore Water Supply.

General Knollys Report

no 30. This has been bundled
blotted of over. Vide Sht
Week of 7th Milestone - 0·43 Sq Mile.
Battahalli Sht - 0·17 - " -
Total 0·17 - " -
and this words have it -
taken up to 10 miles in all.
open channel before entering
the tank - [illegible]

of thasa, a little South of Galahanka, has an available area of 2 Sqare miles, and another piace close adjoining the west extremity of the present Gathering Grounds, has an area of one third of a Sqrare mile. The Catchment area can thus be doubled."

Nara is also available "a small additional area of 170 acres to the South, not yet connected" with the System of Contour channels.

Para 7 Page 24
Bangalore Water Supply.

This page heading [illegible]
[illegible] of
[illegible]

The following tanks have been taken by

Mr. Simmons, Surveyor, and will be found in the Sama order in his Level book."

P 124 - 15

1 "Levels to, and a Contour of, a small hill S by W of Subadars Chattram.

2. Levels from the East wash bain of Sankey's reservoir to 6½ miles on the Egalahunka road.

3 Levels from the above point to and round the hill to the west.

4, Levels from Sama point to Egalahunka bank.

5. Levels from a point ⊙ 123 of the Contour in no 3, to and round Batta: halli hill.

6 Levels from a point ⊙ 47 on this Contour in no 5 to Subadars Chattram".

Bangalore
31st. march 1884.

Rao

Para 30 Page 41
Bangalore Water Supply.

The country to the north has been examined, and the additional catchment area a little to the South of Galahenka has been contoured. There is first a hill to the west of the 7th mile stone of the road and this would afford an area of about 0.43 Square mile: then proceeding westward there is the Baltalli hill, of which the part sufficiently high measures 0.70 Square mile. A mile South of the western Side of the above hill there is a small hill with an abandoned

of 0.04 Square mile, or
altogether 1.17 Square mile
could be obtained in this
locality. The distances
the water would have
to be brought would be
between 9 and 10 miles."

The above quotations
are made to show, that
the possibility of bringing
in an additional supply
into the reservoir from
fresh catchment areas
was decided years
before General Fischer's
acquaintance with the
topography of Bangalore
which dates from 1888
when he first submitted
his

his Habbal Schama.

The crest of the main
of General Sankey's Ra
: Sarovir is 3033 feet abo.
mean sea-level, and the
distance to the extreme
high ground on the south
and south-east of Gala
hanka is 8 miles - with
a rise of 9 inches per
mile (the fall given in the
lower series of contour
channels) the feeder -
Channel with the gorge
start at a level above
M. S. L. of 3039 feet.

The several peaks
of the high ground abo.
referred

referred to are:- Starting from the north of the reservoir over above the Habbal tank,- 3,088. 3089., 3104, and 3158 feet respectively above M.S.L. (Vide Topo map) The ground thus available is over 2½ Square miles, and Since the present Catchment is only 2½ Square miles the Sup: ply can be easily doubled

The further Channel from this additional Gathering ground will be in Span cutting up to a point due north Habbal tank, the valley here must

must be crossed by—
wrought iron Syphon,
or more cheaply by a
wooden fluma carried
on trestles made of
old rails, to the opposite
rising ground, where
after running a short
distance in cutting it
must be taken straight
through the intervening
ridge to the reservoir
in a tunnel probably
of half a mile in length

Para 23 Page 35
Bangalore Water Supply.

It may not be known
that the present great
Scarcity of water

city is, in a measure,
due to 3/4 acres of the
drainage area of the
Sampangi and Dharmambudi
tanks having been di
verted into the new
reservoir.

The capital outlay
on the reservoir was
Rupees 5,40,169 and
recent improvements
have probably cost an
additional 60,000 Rupees.
If therefore the outlay
of another lac could
make this work a
success, and establish
it as a source of
water

water supply to the city
it would be capital
most usefully and eco:
:nomically spent.

My Dear. [signature]
25. 11. 92.

Copy is in a measure,

DPW (10)

Bangalore Water Supply

This memo has been drawn up by Mr Standish Lee at my request — In the file I returned to you some days ago there is a tracing of the grounds N & W of Sankey's Reservoir together with a memo. dated 20 April '92 in which I requested Col Bowen to see if any large addition could be made to the gathering grounds of Sankey's. Col Bowen & Mr Scaldwell investigated the subject (took levels &c) & told me that no such addition was possible. Then it was that I went to Hesaragatta. When speaking casually to Mr Standish Lee a few days ago he mentioned that Col. Sankey had taken levels & considered the addition feasible & asked him to put the information (as reported by Col Sankey) on paper, & the memo. is the result.

> Please now number as far as possible and in a general way, write the Catchment of Sankey's, on the work already done, & the work thereby made useful for the City's supply. The levels should be in Col Sankey's hand but a general sketch in pencil will do. Send it in the name of Standish Lee to me. Thanks.
> The Mysore — Hesaragatta "
> Volumes of Bangalore water supply
> [illegible] the Secretary Port

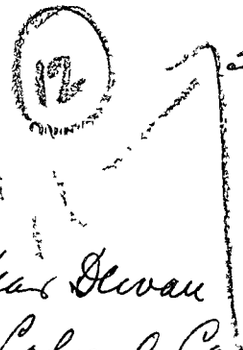
There is every chance of Sankey's Reservoir being given up or abandoned & the Dunlop-Hesaragatta water supply adopted. Mr Lee will write a memo. on the understanding that the Mysore State will be asked to contribute to the Trough of the Cantonment. It is most desirable for the supply of the Troops & Cantt, that we be sure of the City, if its Catchment area can be secured for the City, it is. Sankey Tank was formed by Col. Bowen & Scaldwell and he [illegible] that they had not before them. What Col Sankey had written — 4.2.67.11.92

Peradeniya
3rd Dec

My Dear Dewan

I only last night received
your D.O of 26th regarding
the Bangalore water works.
I have not all the papers
with me to enable me to
give you the information you
require about Basketgi Reservoir.
I will write to the Municipal
Chief if the calculations could
be supplied & give the

why they are not excavated long ago when it was found that even in good seasons the rainfall was hardly sufficient and I am inclined to think that Col. Bowen & Mr Scallan are quite right when they reported that it was not feasible to maintain the catchment: however I will put Mr Mundahl Jr on to the work as I do not wish to neglect any means with Mr Scallan's information for the Hawkesville scheme I myself do not believe in Sunkey's. Only reservoir is a source of water, nor do I believe in long catchment channels. I intended leaving on the 16th but will from now come back to Indooroopilly on 6th as I would like to see you before you leave for Clunes & also because I want to be



5-12-92

My dear Dewar

Colonel Campbell has just sent me Mr Standish Lee's report on increasing the catchment of Saukey tank. I cannot understand why all this has been brought up again after General Mullins had disposed of it in his report (you will find this in the file) to Govt of Madras

There are a few acres which can be added to the catchment

Note. This would, however, take away all, the supply to Mullis & Apparaotank

tank; Scaldevell may be able to tell you what we could get from this source supposing Saukey tank dries up. I should say we might get nearly 1 Gallon per head for the Pettah from this source, but Scaldevell will be able to give more reliable data than I can.

I am heartily sick, and have been told to remain quiet.

Did you get my D.O about Duncan's furlough, what am I to do. I cannot think you intend to let Duncan remain in doubt much longer.

Yours Sincerely

W D W Stubbs

South of Subadar's Chattram, & that is all, the area so small & ground so broken & rocky, it was never considered worth adding

Mr Scaldwell took levels again (as you probably know) this year, under Colonel Bowen's orders, to see if additional catchment could be brought into Sankey's tank, & came apparently to the same conclusion as General Mullins in 1884 & if Colonel Bowen abandoned the idea, this ought to be enough to settle the question I should say.

Scaldwell is out at Hessaraghatta Sheleine, but you might find out & send for him, as he can give you all details you may require -

For this year country Not wanting supply, we must depend on what we can get from Sankey's tank now, and on wells, and if you like Water we can lay down pipes from the Dam below Sankey's tank to the cistern of